



# 1998 TRI Public Data Release



## *Questions, Answers and Facts*

### **What is the Toxics Release Inventory (TRI) Program?**

Congress passed the Emergency Planning and Community Right-to-Know Act (EPCRA) in 1986. Section 313 of EPCRA, called the Toxics Release Inventory (TRI), mandates that certain businesses submit annual reports detailing the release and management of toxic chemicals.

Based on the premise that people have a right to know about toxic chemicals in their community, these emission reports are compiled into a computerized database and then made available to the public. This database, easily available over the Internet, can be used to provide information on emissions from a particular facility, in a particular community, or of a particular chemical. In many cases this information has stimulated reductions in emissions, both through focusing facility managers' attention on waste and its reduction, and through increased involvement by the public. Since the program's inception, reported releases, as adjusted for changes in the reporting requirements, have decreased by about 45%.

### **New Information—the 1998 Data**

The reporting requirements—originally restricted to the manufacturing sector-- were recently expanded to seven new industry sectors. The 1998 data includes, for the first time, toxic chemical release information from the metal and coal mining industry, electricity generating facilities, commercial hazardous waste treatment facilities, solvent recovery services, petroleum bulk terminals, and wholesale chemical distributors. This is exciting and important new information from nearly 2000 newly reporting facilities, documenting 4.93 billion pounds of toxic chemical releases.

### **Some Facts About the 7 New Industry Sectors**

#### Metal Mining

In terms of total pounds of chemicals released on- and off-site, the metal mining industry is the most important new industry, with national releases totaling 3.51 billion pounds. Many mines extract, move, store, process, and dispose of large amounts of waste rock and ore-materials which often contains low concentrations of naturally occurring metals. The vast majority of this material is placed in surface impoundments or on the land, and the metals are reported as on-site releases to land. This previously buried material is exposed to potential leaching by rain, snow, and acid mine drainage, and must be carefully managed and monitored to prevent any surface water or groundwater contamination. There are also air releases from ore processing and metal refining operations.

#### Electricity Generating Facilities

In terms of total pounds of chemicals released on- and off-site, the electricity generating industry is the second most important new industry. In 1998 the sector released 1.12 billion pounds of chemicals nationwide, a fairly large number when you consider that all of the original industries combined released 2.4 billion pounds of chemicals in 1998. From coal-fired plants, typical releases are of metals contained in the coal ash generated during coal combustion. Large quantities of this ash may be disposed of in on- or off-site landfills, or returned to coal mines for disposal. Other releases reported include hydrochloric acid, hydrogen fluoride and formaldehyde; these chemicals are formed during combustion. In Region 8, air releases of acids and the disposal of coal ash to on- and off-site landfills made up the majority of this sector's releases.

### Coal Mining

Nationally, this industry reported 13.3 million pounds of releases; of that, 11.5 million pounds were released to land in the form of coal ash. Coal ash contains low concentrations of metals and metal compounds.

### Commercial Hazardous Waste Treatment

These are the facilities that treat, store, and dispose hazardous waste (they are known by the acronym TSD). The reporting requirements apply only to those TSD facilities regulated by subtitle C of RCRA, which is the most stringent level of regulation. For analytic purposes, this industry's releases were combined with those from solvent recyclers, and nationally, releases totaled 281.8 million pounds. As this industry's purpose of business is to treat wastes and dispose of them into on-site landfills, that is where almost all of the reported releases went. Most facilities also reported air emissions.

### Solvent Recovery Services

This industry collects, recycles, and redistributes solvents used in many industrial applications. As many of the facilities are co-located with Commercial Hazardous Waste Treatment facilities, their releases were aggregated and analyzed in conjunction with each other.

### Petroleum Bulk Terminals

These establishments are primarily engaged in the wholesale distribution of petroleum products. As an industry, they reported 4.7 million pounds of releases in 1998, and most of that, 4.3 million pounds, went to the air. Chemicals releases most frequently reported were for typical constituents of gasoline: benzene, toluene, ethyl benzene, xylene, and in California, methyl tert-butyl ether.

### Wholesale Chemical Distributors

In the course of distributing chemicals, many wholesalers repackage and sometimes reformulate their products. Nationally, this industry reported releases of 1.6 million pounds, with the vast majority of releases going to the air.

### **A Note on TRI and Releases:**

When compiling information for sector analyses, EPA aggregates all the on-site releases (air, water, and land disposal), and the amounts transferred off-site for disposal to form a number called 'total release.' When comparing data from year to year, the data is often normalized to account for changes in the list of reportable chemicals.

It is important to note that release should not be directly equated with risk. The TRI is meant to provide a starting point; emission reports from a facility should be used in conjunction with other information like chemical toxicity, site-specific conditions, and exposure potential.

### **TRI On-Line:**

For more detailed information on the Toxics Release Inventory Program or to access the TRI database, visit EPA on-line at:

<http://www.epa.gov/tri>

The TRI database is also available at EPA's Envirofacts Warehouse:

<http://www.epa.gov/enviro>

### **How do I find out more?**

TRI is a starting point for learning more about the toxic chemical releases in your community. We will be more than happy to answer your questions and assist you in learning more about the TRI program in Region 8.

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